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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/656,833	09/05/2003	James Andrew Walsh	019384-9176-00	8402

23409 7590 07/15/2005

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EXAMINER
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MACKEY, PATRICK HEWEY

ART UNIT	PAPER NUMBER
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3651

DATE MAILED: 07/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/656,833	<b>Applicant(s)</b> WALSH ET AL.	
	<b>Examiner</b> Patrick H. Mackey	<b>Art Unit</b> 3651	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 June 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>060205</u> . | 6) <input type="checkbox"/> Other: _____  |

5-0-0

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 4-14, 19-43 are rejected under 35 U.S.C. 102(b) as being anticipated by Dutro.

Dutro discloses a foldover apparatus for interfolded sheets (see col. 1, lines 1-5) that includes a conveyor (22) with a guide plate (11); a forming plow (40); and an adjustable vacuum assembly (30) with a vacuum chamber (35). Regarding claims 9-11 and 21, see M.P.E.P. § 2115.

3. Claims 22, 25, 27-29, 32, 34-36, and 39-42 are rejected under 35 U.S.C. 102(b) as being anticipated by Marcalus. Marcalus discloses a method of folding over a portion of at least one top sheet in an interfolded stack of sheets that includes providing a stack of interfolded sheets (11); moving the stack along a path (39); separating a portion of at least one top sheet or two top sheets (20, see col. 3, lines 15-25); moving the portion adjacent a forming plow (receiving station 33); releasing the portion into contact with the forming plow (see col. 3, line 70 – col. 4, line 2); and moving the portion along the forming plow and folding over the top portion (see Figs. 6-11).

### *Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 4-14, 19-21, 23-24, 26, 30-31, 33, and 37-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marcalus in view of Dutro. Marcalus discloses all the limitations of the claims but it does not disclose separating a top portion up an inclined path using a variable strength vacuum. Marcalus is silent as to how the top portion is separated. However, Dutro discloses a similar device that includes separating a top portion of stack of sheets up an inclined path using a variable strength vacuum for the purpose of automatically separating the top portion using a simple, rugged, compact device (see col. 1, lines 13-26). It would have been obvious for a person of ordinary skill in the art at the time of the applicant's invention to modify Marcalus by separating a top portion up an inclined path using a variable strength vacuum, as disclosed by Dutro, for the purpose of automatically separating the top portion using a simple, rugged, compact device.

6. Claims 1-21, 23-24, 26, 30-31, 33, and 37-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marcalus in view of Aterianus et al. Marcalus discloses all limitations of the claims but it does not disclose separating a top portion up an inclined path using a variable strength vacuum and perforated belts. Marcalus is silent as to how the top portion is separated. However, Aterianus discloses a device that utilizes a variable strength vacuum and inclined, perforated belts (174) that separate a sheet (B) from a conveyor for the purpose of ensuring a sheet is firmly grasped while it is separated. It would have been obvious for a person of ordinary skill in the art at the time of the applicant's invention to modify Marcalus by separating a top portion up an inclined path using a variable strength vacuum and perforated belts, as disclosed by Aterianus, for the purpose of ensuring a sheet is firmly grasped while it is separated.

***Response to Arguments***

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7. Applicant's arguments filed 6/2/2005 have been fully considered but they are not persuasive.

8. The applicant states that the examiner rejected claims as being anticipated by Dutro, U.S. 3,561,751 and that the reference does not have an element 40 identified by the examiner in the rejection. The examiner notes that the applicant did not review the proper reference. Two references by Dutro were cited on form PTO-892 which accompanied the Office Action, U.S. 3,561,751 and U.S. 3,627,302. Although the examiner did not expressly identify U.S. 3,627,302 as the reference relied on in the rejection, it is the only reference containing an element 40. However, the disclosures of the references are similar, and it appears that the applicant's remarks regarding the stationary shelf in U.S. 3,561,751 would also apply to element 40 of U.S. 3,627,302.

9. The applicant states that Dutro does not disclose a forming plow as recited in the applicant's claims. The applicant states that the stationary shelf does not fold over the signatures. In response, the examiner notes that the stationary shelf (40) reads on the claims.

10. Claims 1 and 12 are apparatus claims. In stating that the forming plow disclosed by Dutro does not perform a folding operation, the applicant is attempting to distinguish the apparatus claims from Dutro's prior art apparatus solely in how the apparatus functions. While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. See M.P.E.P § 2114.

11. Claims 22, 29, and 36, are method claims. The applicant states that Dutro does not disclose moving a portion of at least one top sheet along a folding plow and folding over the

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portion of at least one top sheet. The examiner disagrees with the applicant and the examiner notes that the applicant has not limited the distance the top sheet is folded. Dutro discloses moving a portion of at least one top sheet along a folding plow (40) and folding the portion over a stationary shelf (41) (see col. 2, lines 45-55). Additionally, the applicant states that Dutro does not disclose moving a portion of at least two top sheets along a folding plow. In response, see col. 3, lines 1-10.

12. The applicant states that Dutro does not disclose the use of a variable or adjustable strength vacuum. In response, the examiner notes that the vacuum disclosed by Dutro is capable of being varied or capable of being adjusted.

13. The applicant states that Dutro does not disclose that the portion of the sheet that is separated from the stack is the folded edge. Regarding the apparatus claims, inclusion of material or article worked upon by a structure being claimed does not impart patentability to the claims. See M.P.E.P. § 2115. Regarding the method claims, the examiner notes that Dutro discloses separating the entire top portion of the top sheet that extends from the free edge to (and including) the folded edge.

14. The applicant states that Marcalus does not disclose “separating the portion of at least one top sheet . . .” because the portion separated is not part of the stack. The examiner disagrees with the applicant. If the stack, disclosed in Marcalus, as a whole were to be moved, top portion 20 would also move. Therefore, it is part of the stack.

15. The applicant states that Marcalus does not disclose releasing the portion of the top sheet into contact with the blade. In response, See col. 3, line 70 – col. 4, line 2.

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16. The applicant states the Marcalus does not disclose folding over at least two top sheets because a ply is not a sheet. The examiner disagrees. One ply is one sheet. Two plies equals two sheets.

17. The applicant states that Marcalus does not disclose the folded edge is separated from the stack of sheets. In response, the examiner notes that Figure 6 illustrates separating the entire top portion of the top sheet that extends from the free edge to (and including) the folded edge.

18. The applicant states that there is no motivation to combine Marcalus with Dutro. In response, it would have been obvious for a person of ordinary skill in the art at the time of the applicant's invention to modify Marcalus by separating a top portion up an inclined path using a variable strength vacuum, as disclosed by Dutro, for the purpose of automatically separating the top portion using a simple, rugged, compact device.

19. The applicant states that there is no motivation to combine Marcalus with Aterianus. In response, it would have been obvious for a person of ordinary skill in the art at the time of the applicant's invention to modify Marcalus by separating a top portion up an inclined path using a variable strength vacuum and perforated belts, as disclosed by Aterianus, for the purpose of ensuring a sheet is firmly grasped while it is separated.

20. The applicant states that Aterianus does not disclose the use of a variable or adjustable strength vacuum. In response, the examiner notes that the vacuum disclosed by Aterianus is capable of being varied and capable of being adjusted.

### ***Conclusion***

21. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

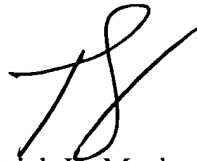
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick H. Mackey whose telephone number is (571) 272-6916. The examiner can normally be reached on Tuesday-Friday 7:00 a.m. - 5:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Crawford can be reached on (571) 272-6911. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'P. Mackey', with a stylized flourish at the end.

Patrick H. Mackey  
Primary Examiner  
Art Unit 3651

July 14, 2005